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Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

- This action is responsive to the amendment filed on February 6, 2006.
- Claims 1-10, 23-26, 28-39, 49-51, and 53-68 are pending. Claims 1, 4, 10, 23, 28, 36, 49, 53, 59, and 66 are amended. Claims 11-22, 28, 40-48, and 52 are cancelled.
- Amendments to the specification are acknowledged and accepted.

Specification

The objections to the specification are withdrawn.

Claim Objections

The objections to claims 10 and 18 have been withdrawn.

Allowable Subject Matter

Claims 2, 32, 38, 62 and 67 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 112

The examiner withdraws the 35 USC 112 rejection of claim 52.

Claim Rejections - 35 USC § 101

The examiner withdraws the 35 USC 101 rejections of claims 40-48.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 28, 36, 39, 49, 50, 59, 66, and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al. (US 6011547) in view of McIntyre et al. (US 20050114232) and further in view of Shaffer et al. (US 20010046330).

Regarding claim 1, Shiota ('547) teaches a data printing system comprising:

An image capturing apparatus, including a memory for storing individual unit identification information of said image capturing apparatus (Shiota ('547), col 2, ln 32-45, recording information, i.e. individual unit identification information, is stored in memory of camera, #1 of figure 1) and an information transmitting unit for transmitting the individual unit identification information and captured image data (Shiota ('547), col 5, ln 28-31, wherein individual unit identification information is added to captured data, and col 5, ln 35-40, wherein transferring image data to print service administration apparatus inherently comprises transmitting unit in image capturing apparatus);

A print service administration apparatus, connected to a network, for administering image data printing and for receiving image data recorded by said image capturing apparatus (Shiota ('547), col 5, ln 35-40, image data is received by image server (#2 of figure 1), which is connected to a network), wherein the print service

administration apparatus includes an input unit for inputting the individual unit identification information and the image data transmitted from the image capturing apparatus (Shiota ('547), col 2, ln 32-36, individual unit identification and image data are transmitted together to print service administration shown in fig 1 with arrows corresponding to data flow between AE (automatic exposure) processing unit #5 and Image Data #8, and between Recording Information Adding Unit #6 and Recording Information #9. With Image server of Shiota capable of receiving individual unit identification information and image data, print service administration apparatus inherently comprises input unit); and

A print processing apparatus, connected to said network, for executing a printing process in accordance with an instruction from said print service administration apparatus (Shiota ('547), col 5, ln 44-50, set-up processing unit (#11 of fig 1) executes print job according to image files stored in image server), via the network (It is well known to print over a network between a printer and a server) the printing process by said print processing apparatus being administered by establishing a logical linkage between the individual unit identification information or the unique order reception ID and the image data (Shiota ('547), col 5, ln 54-59, print processing is administered based on image data #8, recording information #9, and processing condition #10, all of figure 1, wherein printing is carried out by printer #12);

Shiota does not disclose expressly a system further comprising an image capturing apparatus wherein the individual unit identification information includes independent manufacturing information to identify the image capturing apparatus from

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other image capturing apparatus or a print service administration apparatus comprising an order reception ID issuing unit for issuing a unique order reception ID when the individual unit identification information is not transmitted. McIntyre, however, teaches an image capturing apparatus comprising individual unit identification information wherein the individual unit identification information includes independent manufacturing information to identify the image capturing apparatus from other image capturing apparatus (McIntyre, paragraph 27, wherein each digital camera comprises a serial number uniquely identifying the camera from other cameras. Furthermore, each image is given a unique code which may be based upon the serial number, therefor the individual unit identification information is sent to the print service administration apparatus along with the image data).

Shiota and McIntyre are combinable because they are from a similar field of endeavor of print processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the independent manufacturing information of McIntyre with the system of Shiota comprising an image capturing apparatus, a print service apparatus, and a print processing apparatus. The motivation for doing so would have been to provide a system which finds an optimal image processing condition quickly and simply without repetitive adjustments of the condition by test prints so that a high quality print can be promptly provided to a customer when digital image data are to be reproduced (Shiota ('547), col 1, ln 64-67, and col 2, ln 1-6), and to uniquely identify images being generated from a particular image capturing apparatus. Additionally, Shiota suggested independent manufacturing information in col

5, In 23-25, wherein recording information of Shiota may be associated with information set at the time of shipment, i.e. manufacturing information.

The combination of Shiota and McIntyre teaches a data printing system comprising an image capturing apparatus comprising independent manufacturing information, a print service administration apparatus, and a print processing apparatus. Although McIntyre discloses identifying image data by either the unique camera identifier or a customer identifier (McIntyre, paragraph 31), the combination does not disclose expressly a print service apparatus further comprising an order reception ID issuing unit for issuing a unique order reception ID when the individual unit identification information is not transmitted. Shaffer, however, teaches a print service administration apparatus comprising an order reception ID issuing unit for issuing a unique order reception ID when the individual unit identification information is not transmitted (Shaffer, paragraph 25, wherein if individual unit identification is not included with the image data, a customer identity is recorded and associated with the image data. Data associated with image data may be a camera identifier or a customer identifier).

Shiota, McIntyre, and Shaffer are combinable because they are from a similar field of endeavor of print processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the order reception ID issuing unit of Shaffer with the combination of Shiota and McIntyre teaching a data printing system comprising an image capturing apparatus comprising independent manufacturing information, a print service administration apparatus, and a print processing apparatus. The motivation for doing so would have been to provide a

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process to form a collection of digital images associated with a customer by means of a customer identification (Shaffer, paragraph 25). Therefore, it would have been obvious to combine Shaffer with Shiota and McIntyre to obtain the invention as specified in claim 1.

Regarding claim 28, the combination of Shiota ('547), McIntyre, and Shaffer (as combined in claim 1) teaches a print service administration apparatus, comprising:

An identification information receiving means for receiving individual unit identification information of an image capturing apparatus owned by a customer (Shiota ('547), col 2, ln 32-45, recording information, i.e. individual unit identification information, is stored in memory of camera, #1 of figure 1. Information stored in memory is transferred to print service administration apparatus in col 5, ln 35-40) wherein the individual unit identification information includes independent manufacturing information to identify the image capturing apparatus from other image capturing apparatus (McIntyre, paragraph 27, wherein each digital camera comprises a serial number uniquely identifying the camera from other cameras. Furthermore, each image is given a unique code which may be based upon the serial number, therefor the individual unit identification information is sent to the print service administration apparatus along with the image data);

An image data receiving means for receiving image data of said image capturing apparatus (Shiota ('547), col 5, ln 35-40, wherein image data is received by print service administration apparatus from image capturing apparatus);

An order reception ID issuing unit for issuing a unique order reception ID when the individual unit identification information is not received (Shaffer, paragraph 25, wherein if individual unit identification is not included with the image data, a customer identity is recorded and associated with the image data. Data associated with image data may be a camera identifier or a customer identifier); and

An image data storing means for storing said image data in relation to said individual unit identification information or said order reception ID (Shiota ('547), fig 1, image data (#8) and individual unit identification, i.e. recording information (#9), are stored together in image server #2. Also see Shaffer, fig 2, wherein Metadata #34 is stored with pixel information #32 in data store #20).

Regarding claim 36, the combination of Shiota ('547), McIntyre, and Shaffer (as combined in claim 1) teaches a print processing apparatus, comprising:

An identification information receiving means for receiving individual unit identification information of an image capturing apparatus owned by a customer (Shiota ('547), col 2, ln 32-45, recording information, i.e. individual unit identification information, is stored in memory of camera, #1 of figure 1. Information stored in memory is transferred to print service administration apparatus in col 5, ln 35-40) wherein the individual unit identification information includes independent manufacturing information to identify the image capturing apparatus from other image capturing apparatus (McIntyre, paragraph 27, wherein each digital camera comprises a serial number uniquely identifying the camera from other cameras. Furthermore, each image is given

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a unique code which may be based upon the serial number, therefor the individual unit identification information is sent to the print service administration apparatus along with the image data);

An order reception ID issuing unit for issuing a unique order reception ID when the individual unit identification information is not received (Shaffer, paragraph 25, wherein if individual unit identification is not included with the image data, a customer identity is recorded and associated with the image data. Data associated with image data may be a camera identifier or a customer identifier);

An image data receiving means for receiving image data which has a relationship with said individual unit identification information (Shiota ('547), col 2, ln 32-36, individual unit identification and image data are received together by the print service administration shown in fig 1 with arrows corresponding to data flow between AE (automatic exposure) processing unit #5 and Image Data #8, and between Recording Information Adding Unit #6 and Recording Information #9. Also see Shaffer, fig 2, wherein Metadata #34 is stored with pixel information #32 in data store #20, teaching data is received by data store);

A first image forming means for forming an image in a memory medium in accordance with said image data (Shiota ('547), fig 1, image data #8 is saved in image file #7 in image server #2); and

A second image forming means for recording said individual unit identification information or said order reception ID in said memory medium or for forming an image in said memory medium in correspondence with said individual unit identification

information or said order reception ID (Shiota ('547), fig 1, recording information #9, i.e. individual unit identification, is stored in image file with corresponding image data).

Regarding claim 39, which depends from claim 36, the combination of Shiota ('547), McIntyre, and Shaffer teaches a print processing apparatus further comprising:

An individual unit identification information detection means for detecting said individual unit identification information in accordance with said individual unit identification information, stored in said memory medium, or said image, formed in said memory medium in correspondence with said individual unit identification information, and a recording medium processing means for processing said recording medium, in which said image is formed, in accordance with said individual unit identification information detected by said individual unit identification information detection means (Shiota ('547), col 5, 40-53, processing of files is carried out in accordance with the recording information, i.e. individual unit identification, and image data stored together in memory. In order for processing to occur with regards to these two pieces of data, they must inherently be detected and identified before they may be used).

Regarding claim 49, the combination of Shiota ('547), McIntyre, and Shaffer teaches (as combined in claim 1) a print service method in use with a network to which there are connected an image capturing apparatus for capturing and recording image data, a print service administration apparatus for administering a print process of said image data, and a print processing apparatus for printing an image in response to a

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command from said print service administration apparatus, (Shiota ('547), fig 1, showing digital camera, image server, and image reproducing apparatus) comprising the steps of:

Transmitting said image data, captured and recorded by said image capturing apparatus, and individual unit identification information, being unique to each of said image capturing apparatus, to said print service administration apparatus in which said image data and said individual unit identification information are related to each other (Shiota ('547), fig 1, arrows from digital camera #1 to image server #2 show transfer of image data and individual unit identification information), wherein the individual unit identification information includes independent manufacturing information to identify the image capturing apparatus from other image capturing apparatus (McIntyre, paragraph 27, wherein each digital camera comprises a serial number uniquely identifying the camera from other cameras. Furthermore, each image is given a unique code which may be based upon the serial number, therefor the individual unit identification information is sent to the print service administration apparatus along with the image data);

Storing information, which is sent from said image capturing apparatus, into said print service administration apparatus (Shiota ('547), fig 1, information is stored in image server);

An order reception ID issuing unit for issuing a unique order reception ID when the individual unit identification information is not transmitted (Shaffer, paragraph 25, wherein if individual unit identification is not included with the image data, a customer

identity is recorded and associated with the image data. Data associated with image data may be a camera identifier or a customer identifier); and

Transmitting said image data, corresponding to said individual unit identification information or said order reception ID, from said print service administration apparatus to said print processing apparatus (Shiota ('547), fig 1, arrows from image data #8, recording information #9, and processing condition #10 to set-up processing unit #11 in image reproducing apparatus #3 show transfer of data from print service administration apparatus to print processing apparatus) when said print service administration apparatus receives said individual unit identification information or said order reception ID together with a printing order (Shaffer, paragraph 25, wherein the customer generates an order description, i.e. a printing order, including an order reception ID. The order description is received by the print service administration apparatus. Upon receiving the order description, transferring and printing commences).

Regarding claim 50, which depends from claim 49, the combination of Shiota ('547), McIntyre, Shaffer and Miyake further teaches a print service method wherein a print service reception processing apparatus for uploading said image data to said print service administration apparatus is connected to said network (Shiota ('547), col 5, ln 38-40, image data transfer occurs over network. Figure 1 shows transfer between digital camera #1 and print service administration apparatus #2); and said print service reception processing apparatus transmits said image data, captured and stored by said image capturing apparatus, and said individual unit identification information to said

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print service administration apparatus (Shiota ('547), fig 1, image file is transferred from image server to image reproducing apparatus) in which said image data and individual unit identification information are related to each other (Shiota ('547), fig 1, image data and unit identification information are related in image file #7 in image server #2).

Regarding claim 59, claim 59 recites identical features as claim 28 except claim 59 is a method claim. Thus, arguments similar to that presented above for claim 28 are equally applicable to claim 59.

Regarding claim 66, claim 66 recites identical features as claim 36 except claim 66 is a method claim. Thus, arguments similar to that presented above for claim 36 are equally applicable to claim 66.

Regarding claim 68, which depends from claim 66, claim 68 recites identical features as claim 39 except claim 68 is a method claim. Thus, arguments similar to that presented above for claim 39 are equally applicable to claim 68.

Claims 23, 25, 53, 54, 56, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al. (US 6,795,206) in view of McIntyre et al. (US 20050114232) and further in view of Shaffer et al. (US 20010046330).

Regarding claim 23, Shiota ('206) teaches a print service reception processing apparatus, capable of a communication with an image capturing apparatus (Shiota ('206), fig 1, hard disc and output order receiver, i.e. print service reception processing apparatus, and digital camera shown but not numbered), comprising:

An image data upload means for reading image data stored in said image capturing apparatus (Shiota ('206), col 4, ln 26-34, wherein image data is uploaded and read by image processing laboratory from digital camera);

An identification information reading means for reading individual unit identification information which is stored in said image capturing apparatus (Shiota ('206), col 2, ln 3-12, order information comprises individual unit identification, wherein unit id is and order information is generated in camera, col 4, ln 38-42); and

A transmission means for transmitting said image data and said individual unit identification information through a network (Shiota ('206), col 4, ln 26-34, image data and individual unit id are transferred through a network).

Shiota does not disclose expressly an apparatus wherein the individual unit identification information includes independent manufacturing information to identify the image capturing apparatus from other image capturing apparatus, or an order reception ID issuing unit for issuing a unique order reception ID when the individual unit identification information is not transmitted. McIntyre, however, individual unit identification information wherein the individual unit identification information includes independent manufacturing information to identify the image capturing apparatus from other image capturing apparatus (McIntyre, paragraph 27, wherein each digital camera comprises a serial number uniquely identifying the camera from other cameras. Furthermore, each image is given a unique code which may be based upon the serial number, therefor the individual unit identification information is sent to the print service administration apparatus along with the image data).

Shiota and McIntyre are combinable because they are from a similar field of endeavor of print processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the independent manufacturing information of McIntyre with the apparatus of Shiota comprising an image data upload means, an identification information reading means, and a transmission means. The motivation for doing so would have been to provide a system for reliably associating customer information with the image data so that data is easily stored and search, while reducing the chance of lost data. Additionally, the motivation would have been to provide a method an apparatus by which any operator can output picture image data efficiently regardless of his or her experience (Shiota ('206), col 1, ln 53-56).

The combination of Shiota and McIntyre teaches an apparatus comprising an image data upload means, an identification information reading means, a transmission means, and an order reception ID issuing unit. Although McIntyre discloses identifying image data by either the unique camera identifier or a customer identifier (McIntyre, paragraph 31), the combination does not disclose expressly a print service apparatus further comprising an order reception ID issuing unit for issuing a unique order reception ID when the individual unit identification information is not transmitted. Shaffer, however, teaches a print service administration apparatus comprising an order reception ID issuing unit for issuing a unique order reception ID when the individual unit identification information is not transmitted (Shaffer, paragraph 25, wherein if individual unit identification is not included with the image data, a customer identity is recorded

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and associated with the image data. Data associated with image data may be a camera identifier or a customer identifier).

Shiota, McIntyre, and Shaffer are combinable because they are from a similar field of endeavor of print processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the order reception ID issuing unit of Shaffer with the combination of Shiota and McIntyre teaching an apparatus comprising an image data upload means, an identification information reading means, a transmission means, and an order reception ID issuing unit. The motivation for doing so would have been to provide a process to form a collection of digital images associated with a customer by means of a customer identification (Shaffer, paragraph 25) to guarantee the identification of incoming image data. Therefore, it would have been obvious to combine Shaffer with Shiota and McIntyre to obtain the invention as specified in claim 23.

Regarding claim 25, which depends from claim 23, the combination of Shiota ('206), McIntyre, and Shaffer teaches a print service reception processing apparatus wherein said print service reception processing apparatus executes a process to relate said image data to said individual unit identification information (Shiota ('206), col 3, ln 20-34, wherein print processing occurs with the relation of image data with corresponding processing item, wherein the processing item comprises an individual unit identification information. Image data outputting mean is carried out according to each specific processing item).

Regarding claim 53, claim 53 recites identical features as claim 23 except claim 53 is a method claim. Thus, arguments similar to that presented above for claim 23 are equally applicable to claim 53.

Regarding claim 54, which depends from claim 53, the combination of Shiota ('206), McIntyre, and Shaffer teaches a print service reception processing method wherein said print service reception processing apparatus reads said image data and said individual unit identification information by communicating with said image capturing apparatus (Shiota ('206), col 4, ln 26-34, image data and individual unit id are read by being transferred through a network).

Regarding claim 56, which depends from claim 53, the combination of Shiota ('206), McIntyre, and Shaffer teaches a print service reception processing method wherein said print service reception processing apparatus is capable of being coupled with a memory medium (Shiota ('206), fig 1, output order receiver, i.e. print service reception processor, is coupled with a memory medium #1, containing image data and order file); and said print service reception processing apparatus reads said image data and said individual unit identification information which are stored in said memory medium (Shiota ('206), image data and order file (containing unit identification information) are read from memory medium to begin print processing. See also fig 1, wherein image data and order file are read from memory and stored in output order receiver).

Regarding claim 57, which depends from claim 53, claim 57 recites identical features as claim 25 except claim 57 is a method claim. Thus, arguments similar to that presented above for claim 25 are equally applicable to claim 57.

Claims 3-5, 29, 37 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al. (US 6011547) in view of McIntyre et al. (US 20050114232) and further in view of Shaffer et al. (US 20010046330) and further in view of Tateyama et al. (US 6,425,019), hereafter referred to as Shiota ('547), McIntyre, Shaffer and Tateyama.

Regarding claim 3, which depends from claim 1, the combination of Shiota ('547), McIntyre, and Shaffer teaches a data printing system comprising an image capturing apparatus, a print service administration apparatus, a print processing apparatus, and a printer wherein printing is administered through a logical linkage between an individual unit identification and the image data, as explained above in the rejection of claim 1. The combination of Shiota ('547), McIntyre, and Shaffer does not disclose expressly a system wherein said print service administration apparatus includes a means for notifying to a user of said printing system a ready state to provide a printed copy of said image data. Tateyama, however, discloses a system wherein said print service administration apparatus includes a means for notifying to a user of said printing system a ready state to provide a printed copy of said image data (Tateyama, col 20, ln 40-53, initiator of print request, i.e. the user of the digital camera, is informed to the capabilities

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and status of each printer on the network, including whether a printer is ready to print or not).

Shiota ('547), McIntyre, Shaffer and Tateyama are combinable because they are from a similar field of endeavor of communicating data between multiple devices, and specifically for use in image capturing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the printer ready notification means of Tateyama with the system of Shiota ('547) comprising an image capturing apparatus, a print service administration apparatus, a print processing apparatus, and a printer wherein printing is administered through a logical linkage between a individual unit identification and the image data. The motivation for doing so would have been to provide a data communication apparatus which, in a network to which a plurality of target devices are connected, selects a target device corresponding to an output purpose to obtain appropriate output (Tateyama, col 3, ln 25-29), as well as to provide a system which finds an optimal image processing condition quickly and simply without repetitive adjustments of the condition by test prints so that a high quality print can be promptly provided to a customer when digital image data are to be reproduced (Shiota ('547), col 1, ln 64-67, and col 2, ln 1-6). Therefore, it would have been obvious to combine Tateyama with Shiota ('547) to obtain the invention as specified in claim 3.

Regarding claim 4, which depends from claim 3, the combination of Shiota ('547), McIntyre, Shaffer, and Tateyama teaches a data printing system wherein said individual unit identification further includes provider identification information (Tateyama, col 7, ln

14-20, wherein the minimum format for identification information includes a vendor ID, i.e. provider identification information).

Regarding claim 5, which depends from claim 4, the combination of Shiota ('547), McIntyre, Shaffer, and Tateyama teaches a data printing system wherein said provider identification information and said independent manufacturing information are those defined in USB 2.0 standards (Tateyama, col 22, ln 34-37, wherein system may be implemented using the USB standard. The USB 2.0 Standard is inherent to the aforementioned combination).

Regarding claim 29, which depends from claim 28, the combination of Shiota ('547), McIntyre, Shaffer, and Tateyama teaches a print service administration apparatus wherein said individual unit identification information includes provider identification information (Tateyama, col 7, ln 14-20, wherein the minimum format for identification information includes a vendor ID, i.e. provider identification information) and independent manufacturing identification information (McIntyre, paragraph 27, wherein each digital camera comprises a serial number uniquely identifying the camera from other cameras. Furthermore, each image is given a unique code which may be based upon the serial number, therefor the individual unit identification information is sent to the print service administration apparatus along with the image data).

Regarding claim 37, which depends from claim 36, the combination of Shiota ('547), McIntyre, Shaffer, and Tateyama teaches a print processing apparatus wherein said individual unit identification information includes provider identification information (Tateyama, col 7, ln 14-20, wherein the minimum format for identification information

includes a vendor ID, i.e. provider identification information) and independent manufacturing identification information (McIntyre, paragraph 27, wherein each digital camera comprises a serial number uniquely identifying the camera from other cameras. Furthermore, each image is given a unique code which may be based upon the serial number, therefor the individual unit identification information is sent to the print service administration apparatus along with the image data).

Regarding claim 51, which depends from claim 49, the combination of Shiota ('547), McIntyre, and Shaffer and Tateyama teaches a print service method comprising the step of:

Notifying to a user of said print service method a ready state to provide a printed copy of said image data (Tateyama, col 20, ln 40-53, initiator of print request, i.e. the user of the digital camera, is informed to the capabilities and status of each printer on the network, including whether a printer is ready to print or not).

Claims 6, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al. (US 6011547) in view of McIntyre et al. (US 20050114232) and further in view of Shaffer et al. (US 20010046330) further in view of Pavley (US 6,445,460), hereafter referred to as Shiota ('547), McIntyre, Shaffer and Pavley.

Regarding claim 6, which depends from claim 1, the combination of Shiota ('547), McIntyre, and Shaffer teaches a data printing system comprising an image capturing apparatus, a print service administration apparatus, a print processing apparatus, and a printer wherein printing is administered through a logical linkage between a individual

unit identification and the image data, as explained above in the rejection of claim 1.

The combination of Shiota ('547), McIntyre, and Shaffer does not disclose expressly a data printing system wherein said image data is stored in an image data recording area of a data file and said individual unit identification information is stored either in a header part or in a job descriptor part of said data file. Pavley, however, discloses a data printing system wherein said individual unit identification information is stored in a job descriptor part of said data file (Pavley, in Image File #835 of fig 4, individual unit identification information is stored as a job descriptor part of said data file in the image tag #825 portion of fig 4 and 5. See also col 4, ln 56-67 and col 5, ln 1-8).

Shiota ('547), McIntyre, Shaffer and Pavley are combinable because they are in a similar field of endeavor of digital cameras and data printing systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the system of Pavley wherein the individual unit identification information is stored in a job descriptor part of the data file with combination of Shiota ('547), McIntyre, and Shaffer teaching a system comprising an image capturing apparatus, a print service administration apparatus, a print processing apparatus, and a printer wherein printing is administered through a logical linkage between a individual unit identification and the image data. The motivation for doing so would have been to provide a system to utilize file attributes for automatic image file handling (Pavley, col 1, ln 46-51), as well as to provide a system which finds an optimal image processing condition quickly and simply without repetitive adjustments of the condition by test prints so that a high quality print can be promptly provided to a customer when digital image data are to be reproduced

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(Shiota ('547), col 1, ln 64-67, and col 2, ln 1-6). Therefore, it would have been obvious to combine Pavley with the combination of Shiota ('547), McIntyre, and Shaffer to obtain the invention as specified in claim 6.

Regarding claim 8, which depends from claim 7, the combination of Shiota ('547), McIntyre, Shaffer and Pavley further teaches a data printing system wherein at least a part of said individual unit identification information is stored in a vendor unique portion of said job descriptor part (Pavley, in Image File #835 of fig 4, individual unit identification information is stored as a job descriptor part of said data file in the image tag #825 portion of fig 4 and 5. Portion is vendor unique as being a proprietary format of Pavley. See also col 4, ln 56-67 and col 5, ln 1-8).

Regarding claim 9, which depends from claim 1, the combination of Shiota ('547), McIntyre, Shaffer and Pavley further teaches a data printing system wherein said image data is stored in an image data recording area of a data file and said individual unit identification information is stored in a tag portion of a data file (Pavley, in Image File #835 of fig 4, individual unit identification information is stored in the data file as the image tag #825 portion of fig 4 and 5. See also col 4, ln 56-67 and col 5, ln 1-8).

Regarding claim 10, which depends from claim 9, the combination of Shiota ('547), McIntyre, Shaffer and Pavley teaches a system wherein said image data and individual unit identification information are stored in a data file in accordance with EXIF standards (McIntyre, paragraph 27, wherein image data and individual unit identification information are stored in accordance with EXIF standards).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al. (US 6,011,547) in view of McIntyre et al. (US 20050114232) and further in view of Shaffer et al. (US 20010046330) and further in view of Miyake et al. (US 6,724,502) hereafter referred to as Shiota ('547), McIntyre, Shaffer, and Miyake.

Regarding claim 7, which depends from claim 6, the combination of Shiota ('547), McIntyre, and Shaffer teaches a data printing system comprising an image capturing apparatus, a print service administration apparatus, a print processing apparatus, and a printer wherein printing is administered through a logical linkage between an individual unit identification and the image data. The combination of Shiota ('547), McIntyre, and Shaffer does not disclose storing image data and individual unit identification in accordance with DPOF standards in a header of job description portion of said data file. Miyake, however, teaches a digital camera which stores data in accordance with DPOF standards (Miyake, col 5, ln 40-45, image data and printing information relating to each frame are stored in accordance with DPOF standards. Storing any extraneous data in a DPOF standard is inherently stored in a vendor unique job descriptor part of said data file).

Shiota ('547), McIntyre, Shaffer and Miyake are combinable because they are from a similar field of endeavor of image data management. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the DPOF standards of Miyake comprising storing data in a job descriptor portion of the data file with the combination of Shiota ('547), McIntyre, and Shaffer comprising an image capturing apparatus, a print service administration apparatus, a print processing

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apparatus, and a printer wherein printing is administered through a logical linkage between an individual unit identification and the image data, wherein the individual unit identification is stored in a job descriptor portion of the data file. The motivation for doing so would have been to provide increased control of the printing process by confirming the print number even if a plurality of prints have been requested (Miyake, col 3, ln 18-19). Therefore, it would have been obvious to combine Miyake with the aforementioned combination of Shiota ('547), McIntyre, and Shaffer to obtain the invention as specified in claim 7.

Claims 24 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al. (US 6,795,206) in view of McIntyre et al. (US 20050114232) and further in view of Shaffer et al. (US 20010046330) further in view of Takahashi (US 6,867,882), hereafter referred to as Shiota ('206), McIntyre, Shaffer and Takahashi.

Regarding claim 24, which depends from claim 23, the combination of Shiota ('206), McIntyre, and Shaffer teaches a print service reception processing apparatus which communicates with an image capturing apparatus, comprising an image data upload means, an identification information reading means, and a transmission means for transmitting image data and individual unit identification information over a network. The combination of Shiota ('206), McIntyre, and Shaffer does not disclose expressly a print service reception processing apparatus wherein said print service reception processing apparatus requests said image capturing apparatus to transmit said individual unit identification information. Takahashi, however, discloses a print service

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reception processing apparatus wherein said print service reception processing apparatus requests said image capturing apparatus to transmit said individual unit identification information (Takahashi, col 14, ln 61-67, request for image data, including individual unit identification, is sent by external apparatus to image capturing apparatus. In response to receiving request signal, image capturing apparatus, under control of the communication command execution unit (#106 of fig 1), transmits data to external apparatus in col 15, ln 1-9).

Shiota ('206), McIntyre, Shaffer and Takahashi are combinable because they are in a similar field of endeavor of print service reception processing apparatus for processing image data and a corresponding unit id from an image capturing apparatus. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the requesting operation of Takahashi by the print service apparatus with combination of Shiota ('206), McIntyre, and Shaffer teaching a print service reception processing apparatus which communicates with an image capturing apparatus, comprising an image data upload means, an identification information reading means, and a transmission means for transmitting image data and individual unit identification information over a network. The motivation for doing so would have been to provide a universal communication module that need not comply with a specific communication protocol of an image inputting apparatus, as well as to provide a information processing apparatus and print system to easily print a captured or stored image at reduced cost (Takahashi, col 1, ln 45-67, and col 2, ln 1-2). Additionally, the motivation would have been to provide a method and apparatus by which any operator

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can output picture image data efficiently regardless of his or her experience (Shiota ('206), col 1, ln 53-56). Therefore, it would have been obvious to combine Takahashi with the combination of Shiota ('206), McIntyre, and Shaffer to obtain the invention as specified in claim 24.

Regarding claim 55, which depends from claim 54, the combination of Shiota ('206), McIntyre, Shaffer and Takahashi further teaches a print service reception processing method comprising the step of requesting to said image capturing apparatus a transmittance of said individual unit identification information (Takahashi, col 14, ln 61-67, request for image data, including individual unit identification, is sent by external apparatus to image capturing apparatus. In response to receiving request signal, image capturing apparatus, under control of the communication command execution unit (#106 of fig 1), transmits data to external apparatus in col 15, ln 1-9).

Claims 26 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al. (US 6,795,206) in view of McIntyre et al. (US 20050114232) and further in view of Shaffer et al. (US 20010046330) and further in view of Watanabe et al. (US 6,762,860), hereafter referred to as Shiota ('206), McIntyre, Shaffer, and Watanabe.

Regarding claim 26, which depends from claim 23, the combination of Shiota ('206), McIntyre, and Shaffer teaches a print service reception processing apparatus which communicates with an image capturing apparatus, comprising an image data upload means, an identification information reading means, and a transmission means

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for transmitting image data and individual unit identification information over a network.

The combination of Shiota ('206), McIntyre, and Shaffer does not disclose expressly a print service reception processing apparatus further comprising a display means for displaying an image in accordance with said image data read by said image data upload means, an image selection input means for inputting a selection of an image from images displayed in said display means, an order input means for inputting a print order of said image selected by said image selection input means, and an order information generation means for generating a piece of order information which is related to said individual unit identification information in accordance with said print order, wherein said transmission means transmits said order information to other information processing apparatus. Watanabe, however, teaches a print service reception processing apparatus further comprising:

A display means for displaying an image in accordance with said image data read by said image data upload means (Watanabe, fig 7, image data is displayed to user through browser);

An image selection input means for inputting a selection of an image from images displayed in said display means (Watanabe, col 5, ln 12-21, with images displayed in browser, user is allowed to view and select images from image data);

An order input means for inputting a print order of said image selected by said image selection input means (Watanabe, col 5, ln 12-21, selection of images allows images to be ordered and printed); and

An order information generation means for generating a piece of order information which is related to said individual unit identification information in accordance with said print order (Watanabe, col 5, ln 22-27, order information is generated as an order file, corresponding to image ID, i.e. individual unit identification information);

Wherein said transmission means transmits said order information to other information processing apparatus (Watanabe, col 5, ln 22-27, order file is transferred to application server of central server).

Shiota ('206), McIntyre, Shaffer and Watanabe are combinable because they are in a similar field of endeavor of print order processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the display means, the image selection means, the order input means, and the order information generation means of Watanabe with the combination of Shiota ('206), McIntyre, and Shaffer teaching a print service reception processing apparatus which communicates with an image capturing apparatus, comprising an image data upload means, an identification information reading means, and a transmission means for transmitting image data and individual unit identification information over a network. The motivation for doing so would have been to allow for greater control and user input in the printing process, as well as to provide a method and apparatus by which any operator can output picture image data efficiently regardless of his or her experience (Shiota ('206), col 1, ln 53-56). Therefore, it would have been obvious to combine Watanabe with the

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combination of Shiota ('206), McIntyre, and Shaffer to obtain the invention as specified in claim 26.

Regarding claim 58, which depends from claim 53, claim 58 recites identical features as claim 26 except claim 58 is a method claim. Thus, arguments similar to that presented above for claim 26 are equally applicable to claim 58.

Claims 30, 31, 33, 34, 60, 61, 63 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al. (US 6,011,547) in view of McIntyre et al. (US 20050114232) and further in view of Shaffer et al. (US 20010046330) and further in view of Watanabe et al. (US 6,762,860), hereafter referred to as Shiota ('547), McIntyre, Shaffer and Watanabe.

Regarding claim 30, which depends from claim 28, the combination of Shiota ('547), McIntyre, and Shaffer teaches a print service administration apparatus comprising an identification information receiving means, an image data receiving means, and a storing means for storing the image data in relation to the identification information. The combination of Shiota ('547), McIntyre, and Shaffer does not disclose expressly a print service administration apparatus further comprising an access ID receiving means for receiving an access ID transmitted from a client terminal which is connected to a network, a comparison means for comparing said access ID with said individual unit identification information and for generating a comparison result, and an access restriction means for restricting an access from said client terminal in

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accordance with said comparison result. Watanabe, however, discloses a print service administration apparatus comprising:

An access ID receiving means for receiving an access ID transmitted from a client terminal which is connected to a network (Watanabe, fig 1, shows client terminal #6 connected to a network such as the internet #5, allowing the user to access, view, and perform operations on image data stored in a laboratory server #8 or a center server #12); a comparison means for comparing said access ID with said individual unit identification information and for generating a comparison result (Watanabe, col 6, In 10-20, an access ID is transmitted from user PC to laboratory server or center server. Upon entering access ID, a comparison is generated to allow the user to access the system); and

An access restriction means for restricting an access from said client terminal in accordance with said comparison result (Watanabe, col 2, In 64-66, if a comparison generates a negative result, the user is restricted from using the system).

Shiota ('547), McIntyre, Shaffer and Watanabe are combinable because they are from a similar field of endeavor of print order processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the access ID receiving means, the comparison means, and the access restriction means of Watanabe with the combination of Shiota ('547), McIntyre, and Shaffer teaching a print service administration apparatus comprising an identification information receiving means, an image data receiving means, and a storing means for storing the image data in relation to the identification information. The motivation for doing so would have been

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to allow for greater control and user input in the printing process, as well as to provide a system which finds an optimal image processing condition quickly and simply without repetitive adjustments of the condition by test prints so that a high quality print can be promptly provided to a customer when digital image data are to be reproduced (Shiota ('547), col 1, ln 64-67, and col 2, ln 1-6). Therefore, it would have been obvious to combine Watanabe with the combination of Shiota ('547), McIntyre, and Shaffer to obtain the invention as specified in claim 30.

Regarding claim 31, which depends from claim 28, the combination of Shiota ('547), McIntyre, Shaffer and Watanabe teaches a print service administration apparatus further comprising an image data generation means for generating display image data for display in accordance with said image data received by said image data receiving means (Watanabe, fig 7, image data is displayed to user through browser), and a display image transmission means for transmitting said display image data (Watanabe, fig 2, bidirectional arrows between the user's internet browser #21 and the WWW application server in the center server #12 inherently shows a display image transmission means).

Regarding claim 33, which depends from claim 28, the combination of Shiota ('547), McIntyre, Shaffer and Watanabe teaches a print service administration apparatus comprising a personal information receiving means for receiving personal information (Watanabe, col 6, ln 10-20, an user ID is transmitted from user PC to laboratory server or center server, wherein user ID corresponds to personal information such as name and address of the user, col 5, ln 48-50); and

A personal information memory means for storing said personal information in relation to said individual unit identification information (Watanabe, fig 2, personal information and individual unit identification information are stored in WWW Application Server #15. User ID and personal information correspond to image data and are used for managing image data, col 5, ln 50-62).

Regarding claim 34, which depends from claim 28, the combination of Shiota ('547), McIntyre, Shaffer and Watanabe teaches a print service administration apparatus comprising a print order information receiving means for receiving print order information of said image data (Watanabe, col 5, ln 12-15, through WWW browser application, print orders can be received); and a print order information memory means for storing said print order information in relation to said individual unit identification information (Watanabe, col 5, ln 22-27, when an order is placed by the user, an order file is generated and would inherently be saved for billing purposes).

Regarding claim 60, which depends from claim 59, claim 60 recites identical features as claim 30 except claim 60 is a method claim. Thus, arguments similar to that presented above for claim 30 are equally applicable to claim 60.

Regarding claim 61, which depends from claim 59, claim 61 recites identical features as claim 31 except claim 61 is a method claim. Thus, arguments similar to that presented above for claim 31 are equally applicable to claim 61.

Regarding claim 63, which depends from claim 59, claim 63 recites identical features as claim 33 except claim 63 is a method claim. Thus, arguments similar to that presented above for claim 33 are equally applicable to claim 63.

Regarding claim 64, which depends from claim 59, claim 64 recites identical features as claim 34 except claim 64 is a method claim. Thus, arguments similar to that presented above for claim 34 are equally applicable to claim 64.

Claims 35 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiota et al. (US 6,011,547) in view of McIntyre et al. (US 20050114232) and further in view of Shaffer et al. (US 20010046330) in view of Watanabe et al. (US 6,762,860), and further in view of Niikawa et al. (US 6,834,130), hereafter referred to as Shiota ('547), McIntyre, Shaffer, Watanabe, and Niikawa.

Regarding claim 35, which depends from claim 34, the combination of Shiota ('547), McIntyre, Shaffer, and Watanabe teaches a print service administration apparatus comprising an identification information receiving means, an image data receiving means, a storing means for storing the image data in relation to the identification information, a print order information receiving means, and a print order information memory means. The combination of Shiota ('547), McIntyre, Shaffer and Watanabe does not expressly disclose a print service administration apparatus further comprising a print order processing state memory means for storing a print order processing state in accordance with said print order information in relation to said individual unit identification information, and a print order processing state transmission means for transmitting said print order processing state in response to a reference request with said individual unit identification information. Niikawa, however, teaches a print service administration apparatus further comprising:

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A print order processing state memory means for storing a print order processing state in accordance with said print order information in relation to said individual unit identification information (Niikawa, col 15, ln 8-11, print order processing, such as number of prints and date of printing, is stored in history file in memory, col 16, ln 49-52); and

A print order processing state transmission means for transmitting said print order processing state in response to a reference request with said individual unit identification information (Niikawa, col 14, ln 64-67, col 15, ln 1-2, reference request transmits history file from memory card (#8 of fig 10) to magneto-optical disk (#32 of fig 10)).

Shiota ('547), McIntyre, Shaffer, Watanabe, and Niikawa are combinable because they are from a similar field of endeavor of print order processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the print order processing state memory means and print order state transmission means of Niikawa with the print service administration apparatus of Shiota ('547), McIntyre, Shaffer and Watanabe comprising an identification information receiving means, an image data receiving means, a storing means for storing the image data in relation to the identification information, a print order information receiving means, and a print order information memory means. The motivation for doing so would have been to provide an image capturing apparatus capable of recording and storing a digital image for later retrieval which allows an image to be found based on a combination of photographic conditions in a photographing operation and history data

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concerning an operation for an image file, thereby allowing an efficient and accurate image retrieval (Niikawa, col 2, ln 5-10). Therefore, it would have been obvious to combine Niikawa with the combination of Shiota ('547), McIntyre, Shaffer and Watanabe to obtain the invention as specified in claim 35.

Regarding claim 65, which depends from claim 64, claim 65 recites identical features as claim 35 except claim 65 is a method claim. Thus, arguments similar to that presented above for claim 35 are equally applicable to claim 65.

Response to Arguments

Applicant's arguments with respect to claim 4 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed February 6, 2006 have been fully considered but they are not persuasive.

On page 17, lines 1-5, of Remarks, the applicant argues that col 2, ln 32-45 of Shiota ('547) merely teaches a memory. The examiner respectfully disagrees, citing col 2, ln 32-45 as teaching adding recording information to the image data, wherein the image data and recording information are stored in memory of the image capturing device. Also in col 5, ln 19-25 of Shiota it teaches adding information in memory set at the time of manufacture to image data, thereby providing motivation for adding independent manufacturing information to image data.

On page 18, lines 1-11, the applicant argues that Shiota ('206) merely teaches about processing items in col 2, ln 3-12. The examiner respectfully disagrees, citing col 2, ln 3-12, wherein Shiota teaches processing items are associated with image data.

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Further, in col 2, ln 23-25, Shiota teaches accepting processing items at a laboratory, i.e. a print service reception processing apparatus. A reading means is inherent to sending data to a laboratory. In col 4, ln 48-56, Shiota discloses processing items may be inputted via user input, a network or a removable medium, further teaching transmitting means and reading means. Processing items are data associated with the operation of the camera and the camera itself, and provides teaching for including independent manufacturing information with image data. Additionally, in col 4, ln 56-59 of Shiota, it teaches associating a number with image data to identify picture data to be output, further providing motivation for combining Shiota with independent manufacturing information.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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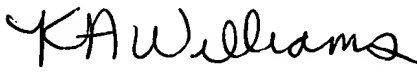
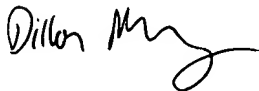
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon J. Murphy whose telephone number is (571) 272-5945. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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DJM



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